

Location: East of TA-18 on the south side of Pajarito Rd., east of the stream channel.

Survey coordinates (brass marker in NW corner of R-20 cement pad): x: 1637835 E y: 1759695 N (NAD 83) z: 6694.3 ft asl (NGVD 29)

Drilling: Conventional mud drilling, casing advance; air rotary core w/ wireline retrieval.

R-20 Start date: 08/15/02, end date: 09/06/02.

Coring start date: 10/16/02, end date: 10/19/02

Borehole R-20 drilled to 1365 ft. bgs. (T.D.).

Data collection:

Hydrologic properties: Field hydraulic test:

Constant Rate Injection Test on screen #1, screen #2, and screen #3

Cores/cuttings submitted for geochemical and contaminant characterization: (0)

Groundwater samples submitted for geochemical and contaminant characterization: (3)

Geologic properties: (12)

Mineralogy, petrography, and chemistry

Borehole logs from R-20:

Lithologic: 0-490 ft. and 785 ft.-1365 ft.

Borehole Video (LANL tool): 82-785 ft. (open hole).

Natural gamma + Induction (LANL tool):

0-80.2 ft. (cased), 80.2 ft.-785 ft. (cased).

Schlumberger Logs: 0-80.2 ft. (cased),

80.2-785 ft. (open hole): Array Induction, Litho

Density, Natural Gamma, Thermal/Epithermal

Neutron, Caliper, Combinable Magnetic

Resonance, and Elemental Capture Sonde.

Natural Gamma (LANL tool): 0-780 ft. (cased),

780-1365 ft. (open hole).

Schlumberger Logs: 0-780 ft. (cased), 780-

1365 ft. (open hole): Thermal/Epithermal Neutron,

Litho Density, Micro Imager, Array Induction,

and Natural Gamma.

Contaminants Detected in R-20 Water Samples: none

Well construction:

Drilling Completed: 09/06/02

Contract Geophysics: 08/26/02; 09/06/02

Well Constructed : 09/07/02-09/15/02

Well Developed : 09/15/02-12/22/02

Westbay Installed : 01/08/03-01/18/03

Casing: 4.5-in I.D. stainless steel with external couplings.

Number of Screens: 3

4.5-in I.D. pipe based, s.s. wire-wrapped with 0.010-in slots.

Screen (perforated pipe interval):

Screen #1 - 904.6 - 912.2 ft. bgs.

Screen #2 - 1147.1 - 1154.7 ft. bgs.

Screen #3 - 1328.8 - 1336.5 ft. bgs.

Well development consisted of wire brushing, bailing, chemical treatment, surging, and pumping.

Groundwater occurrence was determined for R-20 by recognition of first water produced while drilling, by borehole geophysics, and by borehole video.

Static water levels were determined after the R-20 borehole was rested.

Groundwater samples collected from packed off screen intervals after well development.

Geologic contacts for R-20 were determined by examination of cuttings and interpretation of geophysical logs. Contacts may be refined by petrographic, geochemical, or mineralogic analysis of geologic samples.

